

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

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OFFICE OF WATER AND WATERSHEDS

July 11, 2013

Kevin Freeman
Project Coordinator
ARCADIS
695 N. Legacy Ridge Drive, Suite 200
Liberty Lake, WA 99019

Re: Conditional Approval of Dairy Lagoon Review Reports, Administrative Order on Consent ("Consent Order") Docket No. SDWA-10-2013-0080 Yakima Valley Dairies, Washington

Dear Mr. Freeman:

The U.S. Environmental Protection Agency, Region 10 ("EPA") has completed its review of three draft reports:

- Cow Palace, LLC Lagoon Review Report, dated May 20, 2013
- D&A Dairy, LLC (also known as D&A Dairy L.L.C.), George DeRuyter & Son Dairy, L.L.C., and George & Margaret, L.L.C. - Lagoon Review Report, dated May 20, 2013
- Liberty Dairy, LLC and its associated Dairy Facility H&S Bosma Dairy Liberty Dairy and H&S Bosma Dairy Lagoon Review Report, dated May 20, 2013

These reports ("Lagoon Review Reports") were prepared in accordance with the Consent Order Statement of Work (SOW), which states at Section III.F.6 that the Yakima Dairies "...shall submit to the EPA a Lagoon Review Report that provides documentation, i.e., plans and specifications signed by a WA licensed engineer, that shows that existing lagoons are constructed to current WA NRCS 313 standards, including a soil permeability rate not to exceed 1×10^{-6} ("NRCS 313 standard")." The SOW also states that "...the term "lagoon" includes animal waste lagoons, and animal waste management or storage ponds."

Based on EPA's review of the three Lagoon Review Reports, EPA has determined that the there is insufficient documentation to demonstrate that the NRCS 313 permeability standard is met for all but one lagoon, Lagoon #4 at the Cow Palace. All other lagoons must be further evaluated in accordance with the provisions of the Consent Order.

Specific Comments on the Cow Palace Lagoon Review Report

1. Permeability and compaction data coupled with a letter from a WA licensed PE was presented for only one lagoon (Lagoon #4). EPA agrees that this lagoon has been shown to meet the NRCS permeability standard.



- 2. The statements made for Lagoon #2 and Lagoon #3 appear to be discussions during field construction oversight, but it is unclear what the design plans or specifications were, or what the credentials were of the person who did oversight and discussions with the facility. No PE certification was provided. The dates on the emails indicate the discussions took place in the late 1990's. EPA understands that there was no maximum permeability level established by NRCS for lagoons in Washington prior to June, 2001. There would be no assurance that a lagoon constructed prior to 2001 would meet a specific permeability standard even if it was built to NRCS standards at the time of construction.
- 3. There is a pond just north of Kirks Road about a third of a mile west of Arms Road. Based on its location, it appears this pond would likely receive some dairy waste. Treat this pond as a lagoon unless you explain in detail why it is not a lagoon as defined in the Consent Order.
- 4. There is a pond on the north side of Knowles Road between Arms Road and Dekker Road. Based on its location, it appears this pond could receive some dairy waste. Treat this pond as a lagoon unless you explain in detail why it is not a lagoon.
- 5. The following lagoons must be evaluated for permeability: Catch Basin (NW), Catch Basin (NE), Settling Basin A, Settling Basin B, Safety Debris Basin, Lagoon 1, Lagoon 2, Lagoon 3, the pond on Kirks Road about a third of a mile west of Arms Road, and the pond on the north side of Knowles Road between Arms Road and Dekker Road.

Specific Comments on Liberty Dairy and H&S Bosma Dairy Lagoon Review Report

- 1. With regard to the lagoons at these dairies, documentation provided is insufficient to show that these lagoons meet the standard.
- 2. In Figure 1A, two lagoons are labeled "Lagoon #11." Rename one to "Lagoon #10."
- 3. In Figure 1B (see enclosure), there appear to be four additional, unlabeled ponds --- two located about 1300 feet south of Lagoon #15, one roughly two thousand feet to the northwest of Lagoon #17, and one about two thousand feet to the southwest of Lagoon #17. Based on their locations, it appears that these ponds would likely receive some dairy waste. Treat these ponds as lagoons unless you explain in detail why these two ponds are not lagoons.
- 4. In Figure 1C (see enclosure) there is a pond located to the east of Lagoon #1. Treat this pond as a lagoon unless you explain in detail why this pond is not a lagoon.
- 5. The following lagoons must be evaluated for permeability:
 - a. H&S Bosma Dairy Lagoon #1, Lagoon #2, Lagoon #3, Lagoon #4A, Lagoon #4B, Lagoon #5, Lagoon #6, Lagoon #7, Lagoon #8, Lagoon #9, Lagoon #11 (both), Lagoon #12, Lagoon #13.
 - b. Liberty Dairy Lagoon #14, Lagoon #15, Lagoon #16, Lagoon #17, Red Water Pond, north pond about 1300 feet south of Lagoon #15, south pond about 1300 feet south

of Lagoon #15, the pond which is about 2000 feet northwest of Lagoon #17, the pond which is about 2000 feet southwest of Lagoon #17.

Specific Comments on the D & A Dairy and George DeRuyter & Son Dairy Lagoon Review Report

- 1. The report states that there are no documents available to support the standard as specified in the SOW for any of the lagoons at these facilities.
- 2. There is a pond located about a third of a mile north of George DeRuyter & Son Dairy application field #1 as shown in Figure 2 of the draft Dairy Facility Application Field Management Plan, dated May 20, 2013. Based on its location, it appears this pond may receive some dairy waste. Treat this pond as a lagoon unless you explain in detail why it is not a lagoon.
- 3. Figure 1 appears to show six (6) lagoons, including one that is labeled as a stormwater catch basin. In addition, a Digester is identified in the figure but is not discussed as having or not having a lagoon associated with it. None of these lagoons have the required design and construction plans. Treat these other two potential lagoons identified on the lagoon map (Digester and Stormwater Catch Basin) as lagoons in accordance with the Order or explain in detail why these are not lagoons.
- 4. Figure 2 appears to show five (5) lagoons, including one labeled as a "Take Up Pond" in Figure 1 B. The following lagoons must be evaluated for permeability:
 - a. George DeRuyter & Sons Dairy: Lagoon #1, Lagoon #2, Lagoon #3, Lagoon #4, Stormwater Catch Basin, Digester lagoon. Also the pond located about a third of a mile north of George DeRuyter & Son Dairy application field #1 as shown in Figure 2 of the draft Dairy Facility Application Field Management Plan, dated May 20, 2013
 - b. D&A Dairy: Take Up Pond, Lagoon #1, Lagoon #2, Lagoon #3, and Lagoon #4.

Based on EPA's review, each of the Lagoon Review Reports is conditionally approved. The Lagoon Review Reports must be revised in accordance with the comments above and resubmitted to EPA within 30 days of your receipt of this letter.

In accordance with Section III.F.6 of the Consent Order SOW, Respondents must submit a Lagoon Evaluation Plan that addresses each lagoon that does not meet the standard to EPA within 60 days from the date of this letter.

You may contact me at (206) 553-6904, or your legal counsel may contact Jennifer MacDonald at (206) 553-8311, if you have any questions regarding this letter.

Sincerely,

Eric Winiecki

EPA Project Coordinator

Office of Water and Watersheds

Enclosure

cc: Jennifer MacDonald

Rene Fuentes